

ISSUED: JAN. 25, 1995

REVISED: MAY 25, 1995



HOSHIZAKI
ICE / BEVERAGE DISPENSER

MODEL

DM-180A

DM-180A6

DM-180A8

DM-180AX

INSTRUCTION MANUAL

FOREWORD

IMPORTANT

Only qualified service technicians should attempt to install, service or maintain the dispenser. No such installation, service or maintenance should be undertaken until such technician has thoroughly read this Instruction Manual. Likewise, the owner/manager should not proceed to operate the dispenser until the installer has properly instructed them on its operation.

HOSHIZAKI provides this manual primarily to assist qualified service technicians in the installation, maintenance and service of the dispenser.

Should the reader have any questions or concerns which have not been satisfactorily addressed, please call or write to the HOSHIZAKI Care Department for assistance.

HOSHIZAKI AMERICA, INC.
618 Highway 74 South
Peachtree City, Georgia 30269
Attn: HOSHIZAKI Care Department

Phone: 1-800-233-1940 Technical Service
(770) 487-2331
Fax: (770) 487-3360

NOTE: To expedite assistance, all correspondence/communication **MUST** include the following information:

- Model Number
- Serial Number
- Complete and detailed explanation of the problem

- Please review this manual. It should be read carefully before the dispenser is installed and operated. Only qualified service technicians should install, service and maintain the dispenser. This manual should be made available to any such technician prior to installation, maintenance or service.
- Please keep this manual with the dispenser for later reference.

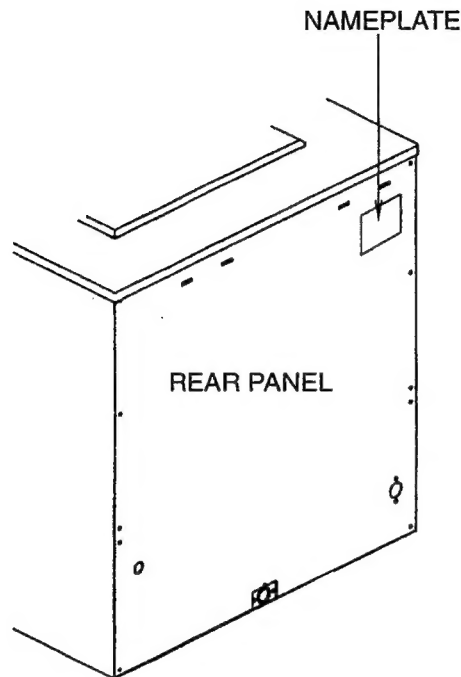
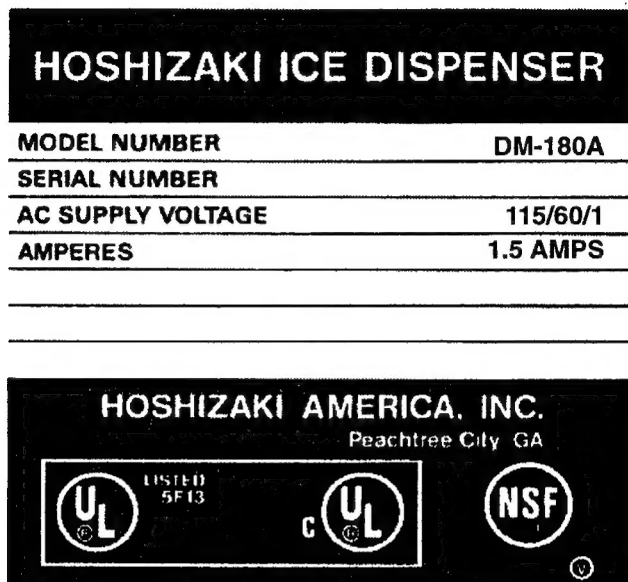
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I. SPECIFICATIONS

1. NAMEPLATE RATING

[a] DM-180A

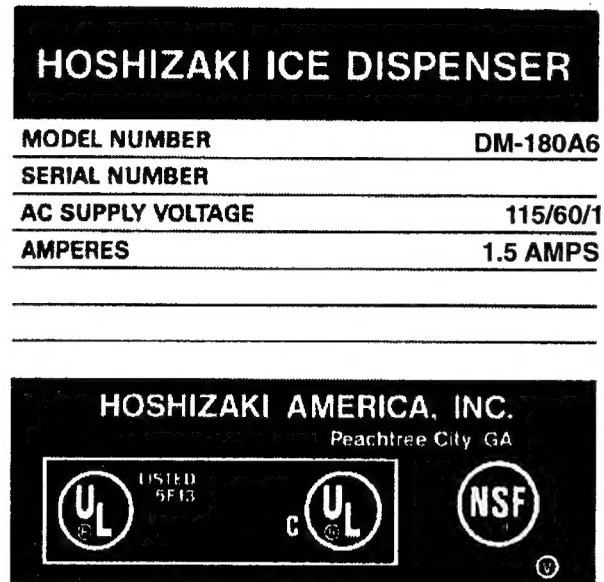


Refer to the NAMEPLATE for electrical specifications. **A Nameplate is located on the upper RIGHT side of the dispenser's Rear Panel.** It cannot be read when the back of the dispenser is against a wall or is otherwise inaccessible.

Therefore, the necessary electrical information is also on an additional label, which can be easily seen by removing only the Front Panel of the dispenser.

We reserve the right to make specification and design changes without prior notice.

[b] DM-180A6

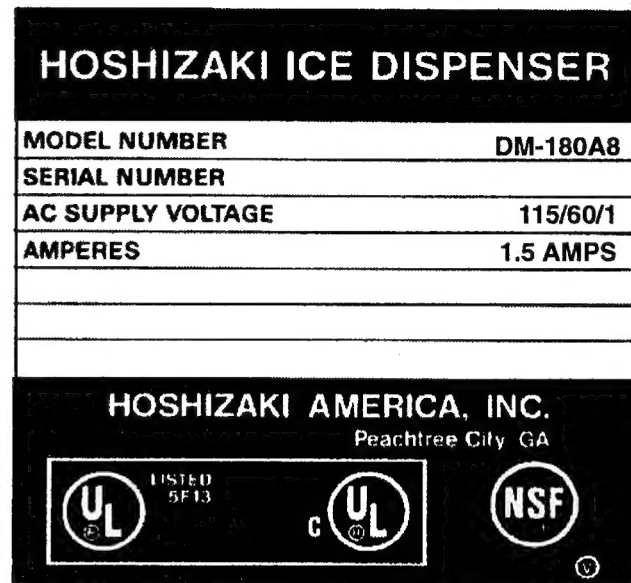


Refer to the NAMEPLATE for electrical specifications. A Nameplate is located on the upper RIGHT side of the dispenser's Rear Panel. It cannot be read when the back of the dispenser is against a wall or is otherwise inaccessible.

Therefore, the necessary electrical information is also on an additional label, which can be easily seen by removing only the Front Panel of the dispenser.

We reserve the right to make specification and design changes without prior notice.

[c] DM-180A8

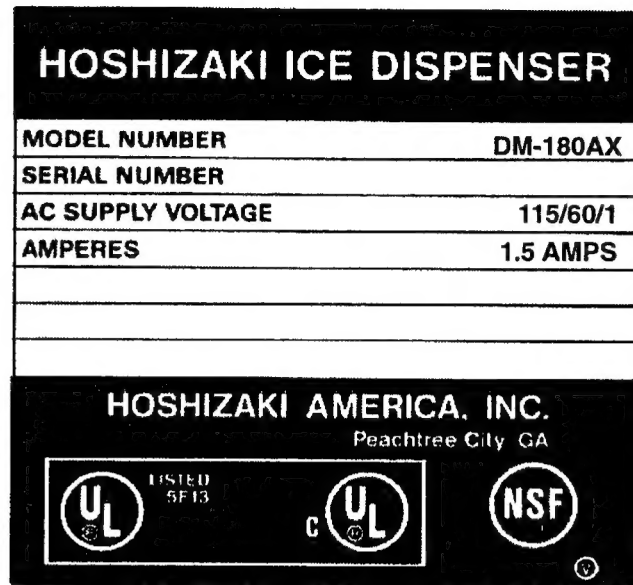


Refer to the NAMEPLATE for electrical specifications. A Nameplate is located on the upper RIGHT side of the dispenser's Rear Panel. It cannot be read when the back of the dispenser is against a wall or is otherwise inaccessible.

Therefore, the necessary electrical information is also on an additional label, which can be easily seen by removing only the Front Panel of the dispenser.

We reserve the right to make specification and design changes without prior notice.

[d] DM-180AX



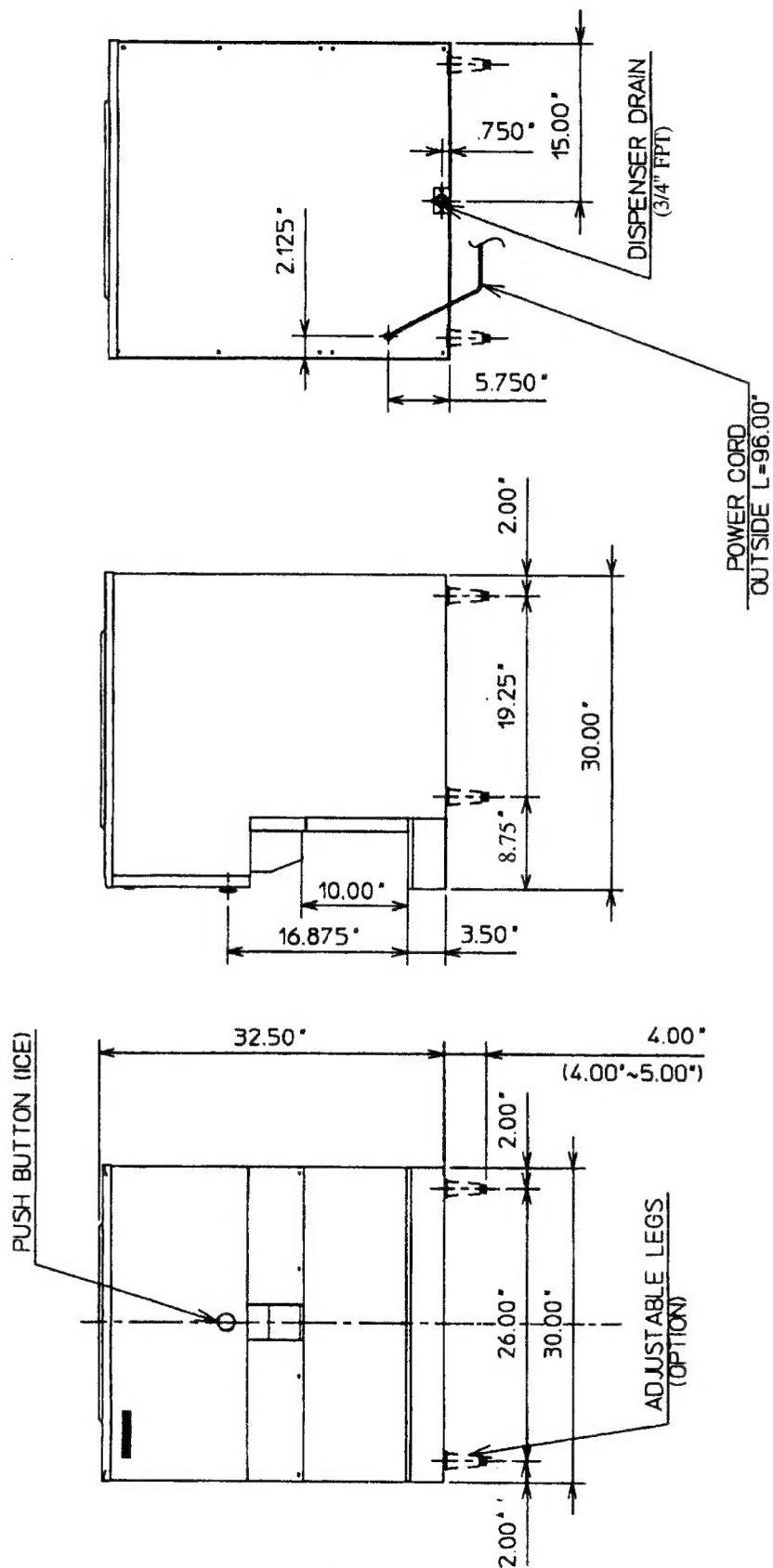
Refer to the NAMEPLATE for electrical specifications. A Nameplate is located on the upper RIGHT side of the dispenser's Rear Panel. It cannot be read when the back of the dispenser is against a wall or is otherwise inaccessible.

Therefore, the necessary electrical information is also on an additional label, which can be easily seen by removing only the Front Panel of the dispenser.

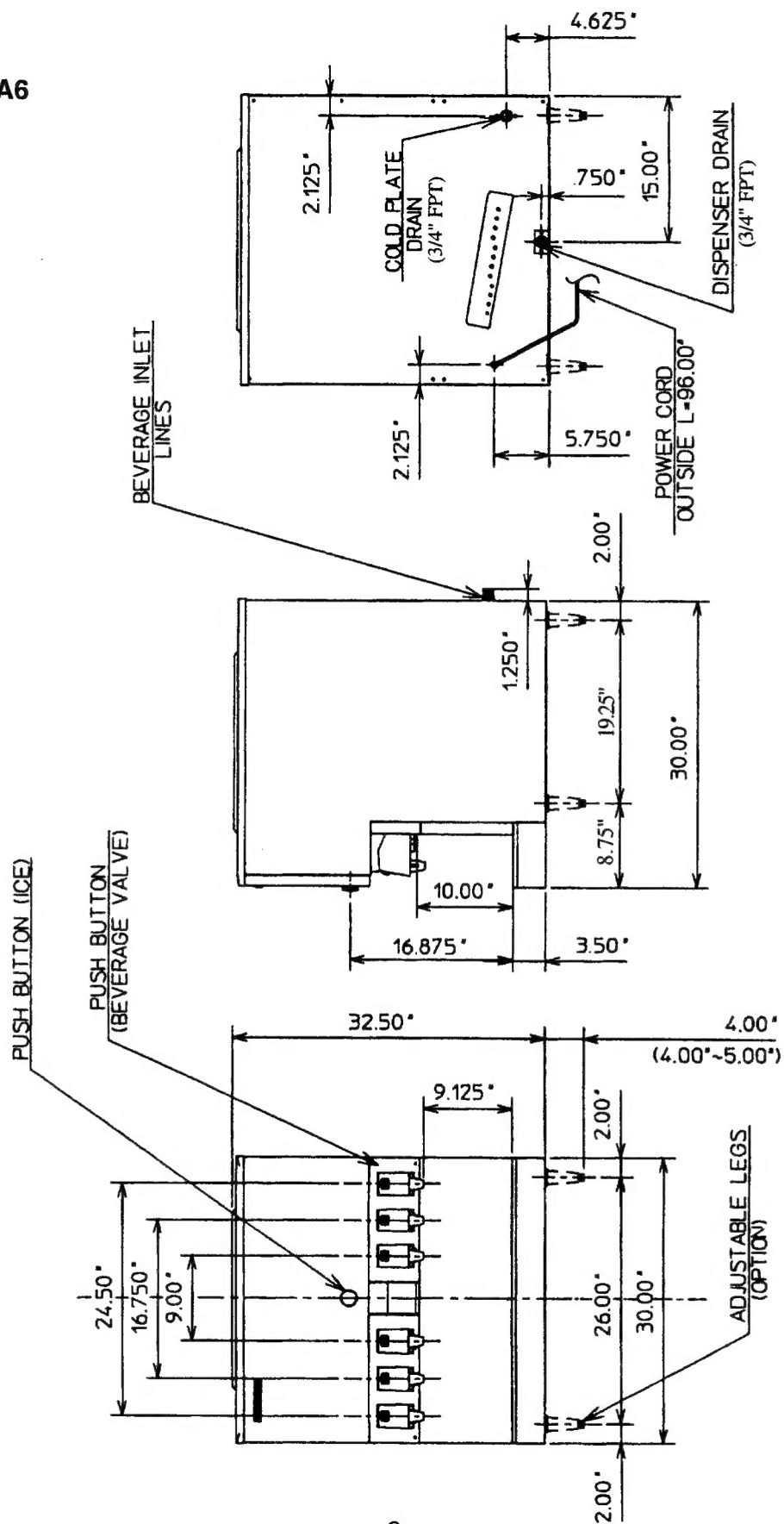
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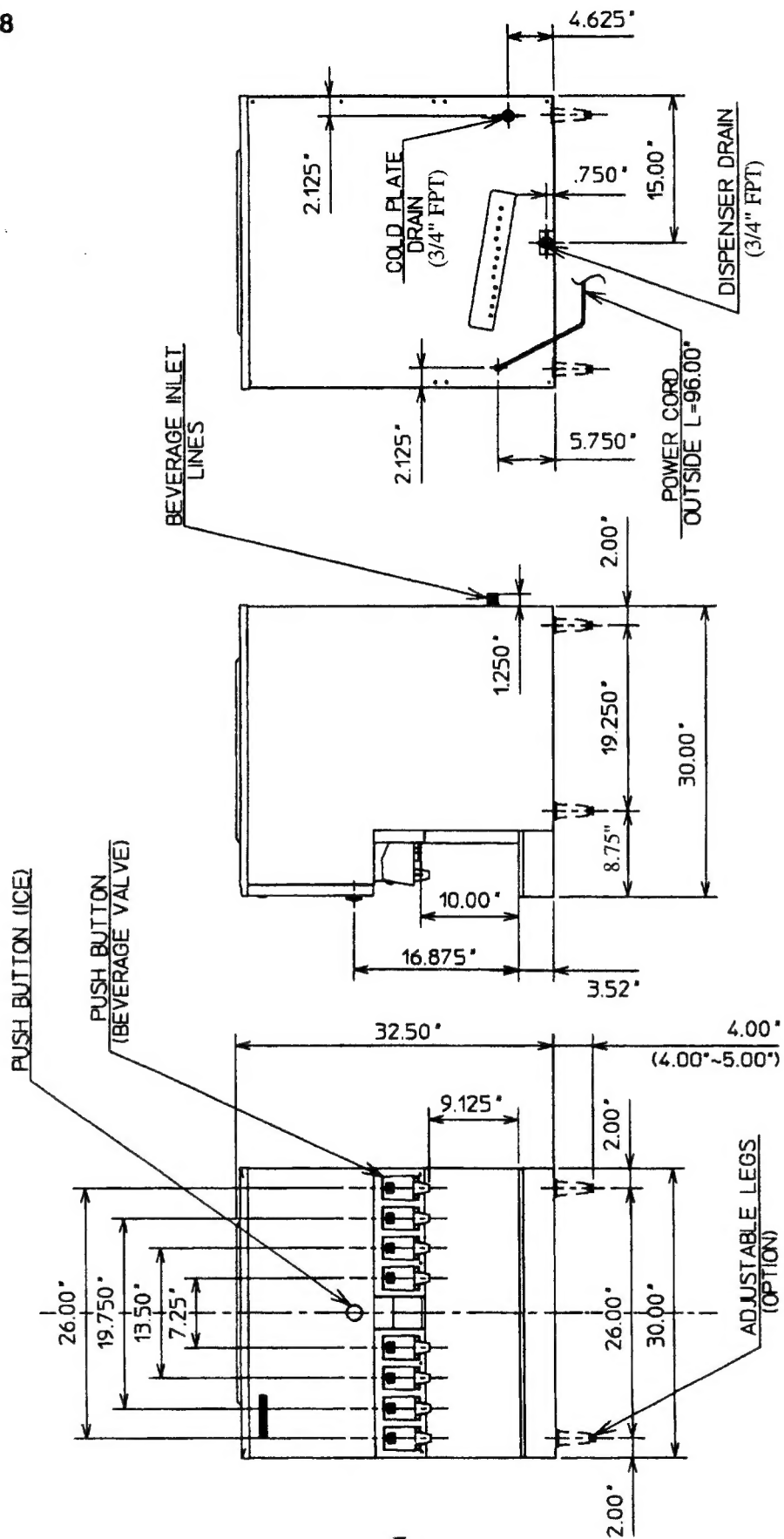
2. DIMENSIONS/CONNECTIONS

[a] DM-180A



[b] DM-180A6





II. INSTALLATION AND OPERATING INSTRUCTIONS

IMPORTANT

Only qualified service technicians should attempt to install, service or maintain the dispenser. No such installation, service or maintenance should be undertaken until such technician has thoroughly read this Instruction Manual.

1. CHECKS BEFORE INSTALLATION

NOTICE

For optimum beverage dispensing performance, HOSHIZAKI recommends the use of a fast flow carbonator.

- Remove all tape, packing material, and shipping cartons from ice dispenser, to prevent possible damage to the machine.
- Remove the accessories package from the dispenser.
- Remove the protective films from the side panels. If the ice dispenser has been exposed to sunlight, or to direct heat, the exterior panels should be allowed to cool before removing the protective films.
- Refer to the NAMEPLATE, located on the upper RIGHT side of the Rear Panel. Be certain that the voltage supply corresponds with the voltage specified on the nameplate.

2. LOCATION

NOTICE

This ice dispenser is not intended for outdoor installation. The air temperature should be within a 45°F to 100°F range. Extended periods of operation at temperatures exceeding these limitations may cause unsatisfactory results.

Position the ice dispenser in a selected site.

- Place the machine on a flat, solid (firm) location.
- Be sure the air temperature range at the location is between 45° F and 100° F.
- Keep the unit away from ovens, grilles or other high heat producing equipment.
- It is recommended that the dispenser be located near a drain, and in a location where water cannot collect on the floor.
- Always avoid an installation site where dripping is not allowed.
- Allow a minimum clearance of 24 inches (60 cm) above the ice dispenser for easy filling with ice.
- If the ice dispenser is to be permanently installed, allow a minimum clearance of 6 inches (15 cm) on the right side, for access to service the drive mechanism.

3. SET UP

NOTICE

It is extremely important that the ice dispensing bin be leveled in both the left-to-right, and the front-to rear directions. If it is not level, unsatisfactory performance in beverage cooling and/or a reduced rate of ice flow may result.

- 1) Unpack the ice dispenser, and remove all shipping cartons, tapes and packing BEFORE operating the unit. Attach the four (4) (optional) adjustable legs to the bottom of the ice dispensing bin. The legs are adjustable from a minimum of 4 inches (102 mm) to a maximum of 5 inches (127 mm). Be careful not to damage the exterior panels when handling the ice dispenser.
- 2) Position the ice dispenser in a selected site. Clean the interior with soap and water and rinse thoroughly.
- 3) Level the ice dispenser in both the left-to-right and the front-to-rear directions (when installed with or without legs).
- 4) When installing the unit without legs, the perimeter where the machine touches the counter should be sealed with silicone to prevent water from leaking under the ice dispenser. The right side panel should be removed prior to applying the silicone, so that it can be easily removed later if drive mechanism inspection and/or service becomes necessary.

4. ELECTRICAL CONNECTION

This ice dispenser requires a proper electrical ground that meets the national and local electrical code requirements. ONLY plug it into a 115 volt, 15 amp outlet with a grounding connection (115V / 15Amp / 60Hz). Refer to the NAMEPLATE for the proper electrical specifications.

CAUTION

The GREEN grounding wire in the factory-installed power cord is attached to a screw on the frame. If it becomes necessary to remove or replace the power cord, be sure to attach the ground wire of the cord to this screw on the frame.

5. DRAIN CONNECTION (Refer to Fig. 1)

- 1) A 3/4" female pipe thread drain outlet is located at the rear of the ice dispenser.
- 2) All horizontal runs of drain pipe must have a 1/4 inch drop per foot to promote good drainage. See the Drain Connection diagram (Fig. 1).
- 3) Drains should not be piped directly to a sewer system. An air gap of a minimum of 2 vertical inches should be between the end of the ice dispenser drain pipe and the floor drain.
- 4) The plumbing from the ice dispenser drain must be separate from the plumbing of other drains.
- 5) A plumbing permit and services of a licensed plumber may be required in some localities.

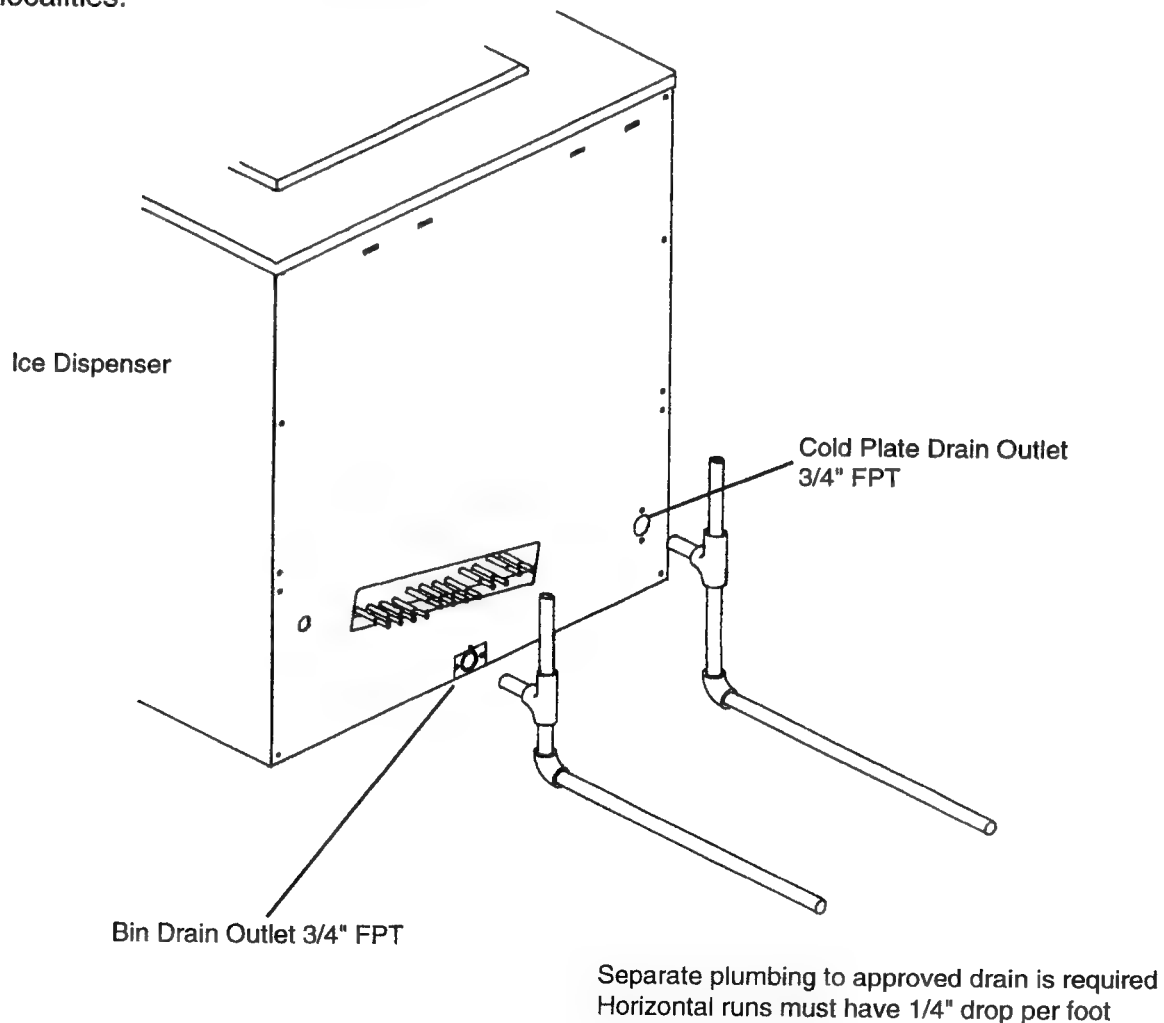


Fig. 1

6. FINAL CHECK LIST

- 1) Is the ice dispenser level?
- 2) Is the ice dispenser located in a site where the ambient temperature will be within the 45° F to 100° F range all year?
- 3) Is there at least 24 inch (60 cm) clearance above the ice dispenser for easy filling with ice? If the unit has been permanently installed, has at least 6 inches (15 cm) clearance been made available at the right side for servicing the drive mechanism?
- 4) Have all shipping cartons, tapes and packing materials been removed from the ice dispenser?
- 5) Have all electrical and piping connections been made properly?
- 6) Has the power supply voltage been checked or tested against the nameplate rating?
Has the ice dispenser been plugged into an outlet with a grounded connection?
- 7) Has the ice dispenser been cleaned properly?
- 8) Has the instruction manual been left with the machine?
- 9) Has the owner/manager been given the name and telephone number of the HOSHIZAKI Service Representative?
- 10) Has the Warranty Registration Card been filled out and forwarded to the factory for warranty registration?
- 11) Each of the items listed above has been accomplished.

Signature - Installer

Date: _____

7. START UP

- 1) Sanitize the ice dispenser and beverage system before START UP. Refer to SANITIZING PROCEDURE in Section III.
- 2) Remove the top and use a clean sanitary container for filling the ice dispenser with ice. Reinstall the top.
- 3) Verify proper operation by pushing the button and observing ice cube dispensing.
- 4) Allow approximately 15 minutes "cool down" time for the Cold Plate to chill.
- 5) Perform the Ratio Control and Brix on each Flomatic 404 valve (On DM-180A6 and DM-180A8 models only) on units having 6 or 8 dispensing heads. Make the two required adjustments on each valve. A syrup separator (standard 5:1 ratio brix cup) and 5/32" Allen (hex) wrench are necessary for making the adjustments.

NOTE: Refer to the dispensing valve manufacturer's instructions for more detail (A6 and A8 models only) .

NOTE: The DM-180AX model has no factory-installed valves. Adjust the valves installed on this model according to the valve manufacturer's recommendations.

- a) To adjust each valve, remove its Syrup Nozzle and place the syrup separator over the syrup tube.
- b) After setting the soda flow rate, set the syrup ratio (5:1) in exactly the same manner.
- c) For fast flow, adjust the screw CLOCKWISE until 7 1/2 ozs. of soda is dispensed in 3 seconds.
- d) Should additional valve adjustment become necessary in the future, use the Allen wrench to turn an adjustment screw either CLOCKWISE (increase flow) or COUNTER CLOCKWISE (decrease flow)—NEVER completely remove the screw while the system is under pressure!

8. PREPARING THE ICE DISPENSER FOR LONG STORAGE

CAUTION

When preparing the ice dispenser for storage, remove all ice, and thoroughly flush each beverage dispensing valve on units so equipped, to remove any syrup residue. The dispenser should be cleaned and wiped dry prior to sanitizing.

- 1) Turn the power supply switch off after removing all ice. Unplug the ice dispenser's plug from the power source receptacle.
- 2) Thoroughly flush the beverage system, on units so equipped, to remove any syrup residue. The ice dispensing bin should be properly cleaned and wiped dry.

III. MAINTENANCE INSTRUCTIONS

1. CLEANING AND SANITIZING INSTRUCTIONS

CAUTION

1. HOSHIZAKI recommends cleaning the ice dispenser, and also the beverage system (when so equipped) at least once a year. More frequent cleaning may be required, depending on existing water conditions.
2. To promote safety, always shut off the electricity to the machine BEFORE any cleaning and maintenance procedures are started. To prevent possible personal injury, damage to the ice dispenser and/or beverage system, DO NOT use ammonia based cleaning solutions.
3. Cleaning and sanitizing solutions are potentially toxic materials - handle them with care. DO NOT let any cleaning or sanitizing chemicals or mixed solutions touch skin surfaces, get into eyes or be ingested.
4. When handling cleaning and sanitizing solutions, always wear liquid-proof gloves. This safety precaution will minimize cleaning or sanitizing solution contact with hands, which could result in skin irritation.
5. Remove all ice cubes from the bin prior to cleaning and sanitizing. DO NOT let ice cubes come into contact with the solutions, as contamination can occur. Any ice cubes which are suspected of being contaminated should be discarded.

[a] CLEANING PROCEDURE

- 1) Clean and sanitize the ice dispensing bin (Refer to the "MAINTENANCE LABEL" instructions on the ice dispenser) as conditions require.
- 2) Remove all ice from the bin.
- 3) Disconnect electrical power to the dispensing bin.
- 4) Remove the Splash Panel to allow access to the Spout assembly for cleaning. (See Fig. 2.)
- 5) Remove both Thumbscrews and then remove the Spout.
- 6) Remove the Snap Pin and slide the Shutter Shaft to the LEFT. Remove the Shutter from the dispenser bin.
- 7) Use a nylon scouring pad, brushes, and cleaning solution to scrub the Bin, Auger, Shutter assembly and Spout. Make the cleaning solution by diluting approximately 5 oz. of Economic Laboratories Inc.'s Lime-A-Way concentrate (recommended cleaning solution) in one gallon of clean water.
- 8) Rinse all parts thoroughly with clean water BEFORE they are sanitized and reinstalled.

[b] SANITIZING PROCEDURE - Following Cleaning

- 9) Use a 5.25% sodium hypochlorite solution at a ratio of 1/2 oz. to 1 gallon of clean water to sanitize all parts described in item 7.
- 10) Rinse all parts thoroughly with clean water.
- 11) Reassemble the parts in the reverse order of removal.
- 12) Reconnect the electrical power. See Section 4 - "ELECTRICAL CONNECTION".
- 13) Check for proper operation.

[c] MAINTENANCE - Exterior Panels

- 1) To prevent corrosion from developing on exterior surfaces, occasionally wipe the surfaces with a clean, soft cloth. Use a damp cloth containing a neutral cleaning solution to wipe off any oil or dirt buildup.

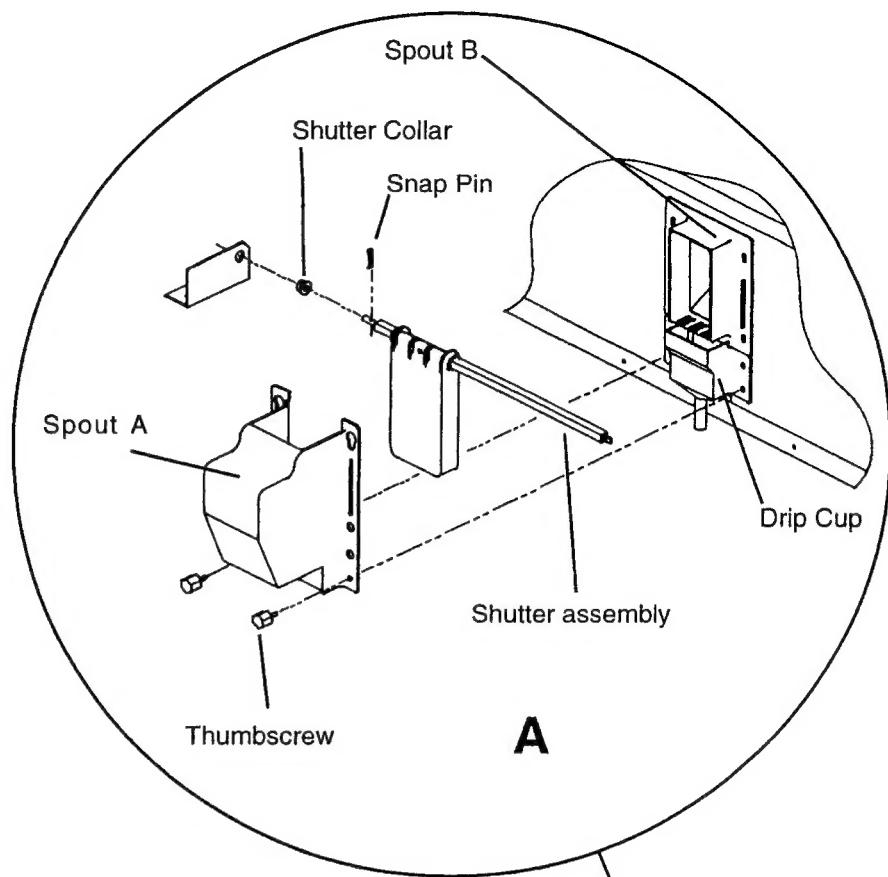
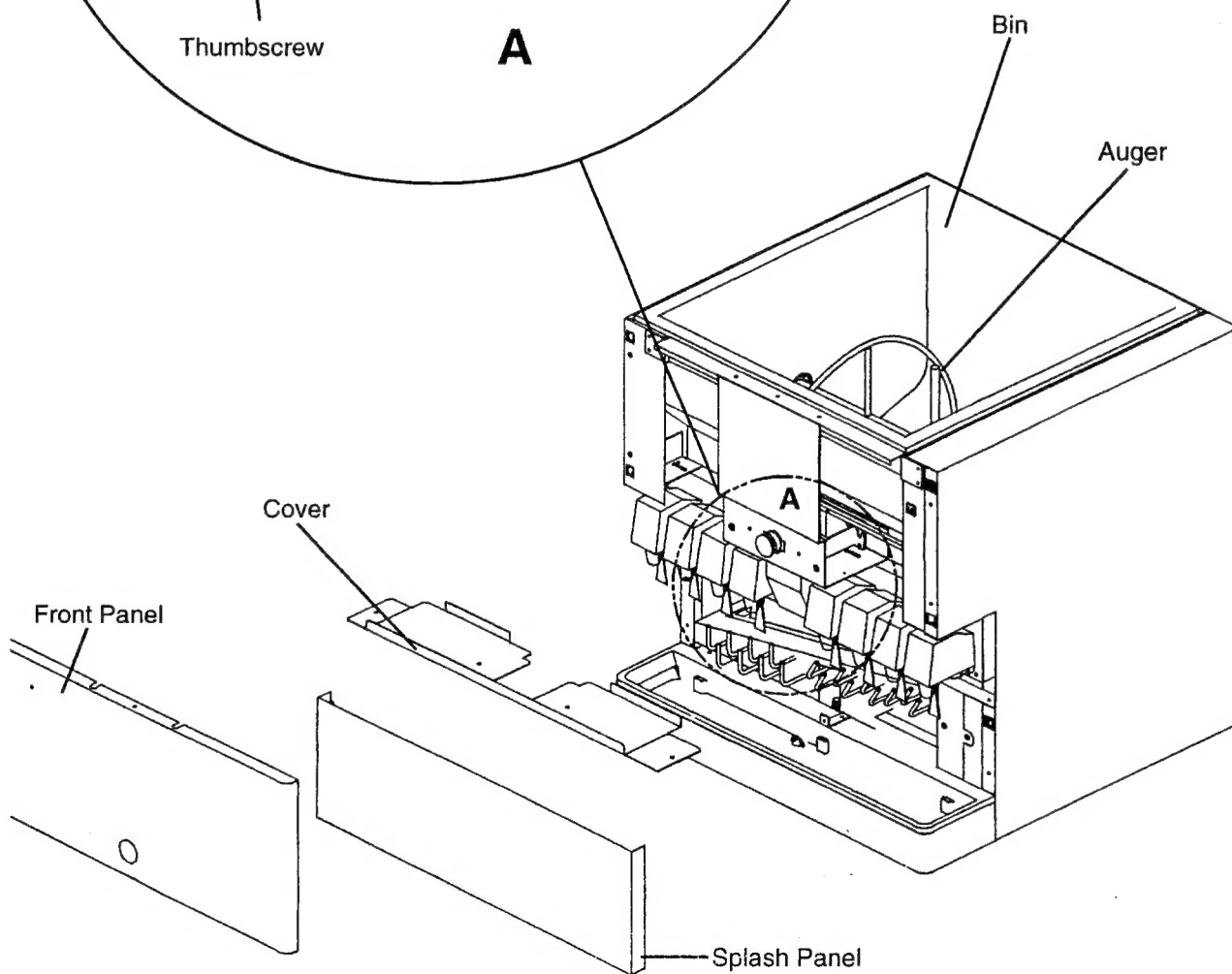


Fig. 2



2. BEVERAGE SYSTEM - MAINTENANCE AND CLEANING INSTRUCTIONS

NOTE

Beverage systems on HOSHIZAKI Ice Dispensers should be cleaned, rinsed and sanitized at least once a year.

Procedures below cover the cleaning, rinsing and sanitizing of the beverage system components that HOSHIZAKI provided, including Cold Plate lines, beverage tubing and dispensing valves.

Please consult the suppliers and/or manufacturers of all other beverage system components. Refer to their literature for information and recommendations covering the proper care, maintenance and cleaning procedures (including cleaning solution compatibility) for the components they supply.

[a] CLEANING PROCEDURE

- 1) A pressure of 60 psi should be used for the cleaning and sanitizing procedures.
- 2) Mild detergent should be dissolved in 1 to 3 gallons of 120° F to 140° F clean water. Prepare this cleaning solution in a clean, empty container.
- 3) Fill a clean 5 gallon rinse water container with cold tap water.
- 4) Disconnect one syrup line from the syrup supply. Connect the line to the cleaning solution container.
- 5) Dispense the cleaning solution through the line and through the beverage valve for a duration of 2 to 5 minutes.
- 6) Allow the cleaning solution to remain in the line and valve for 5 minutes. Disconnect the syrup line from the cleaning solution container, and connect it to the rinse water container. Rinse the line for 2 to 5 minutes.

7) A6 and A8 models:

Carefully remove and disassemble the dispensing valve according to the instructions in the Flomatic Valve Cleaning Guide.

Sanitize the valve as described in daily and weekly cleaning by using the sanitizing solution in place of hot water.

AX model:

Refer to the manufacturer's cleaning instructions for the valve that is installed in the AX model.

- 8) Repeat steps 1 through 7 for each syrup line and valve. The lines will not be reconnected to the syrup supply until they have been sanitized.

[b] SANITIZING PROCEDURE - Following Cleaning Procedure

- 1) Dilute 2.5 fl oz. of 5.25% sodium hypochlorite in 5 gallons of clean water (200 PPM). Prepare the sanitizing solution in a clean, empty container. Prepare enough sanitizer to flush all syrup circuits used on your unit. Five to seven gallons of solution is recommended for sanitizing six to eight syrup circuits. The water temperature should be between 120° F and 140° F.
- 2) Connect one syrup line to the sanitizing solution container. Dispense sanitizing solution through the line and beverage valve for a duration of 2 to 5 minutes.
- 3) Allow the sanitizing solution to remain in the line and valve for 5 minutes. Disconnect the line from the sanitizing solution container, and reconnect it to the syrup supply.
- 4) Repeat steps 1 through 3 for each syrup line and valve.
- 5) Dispense product through each dispensing valve until the taste of the sanitizing solution is gone.

HOSHIZAKI

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